Analysis of Wage Replacement Benefits in Montana . . .

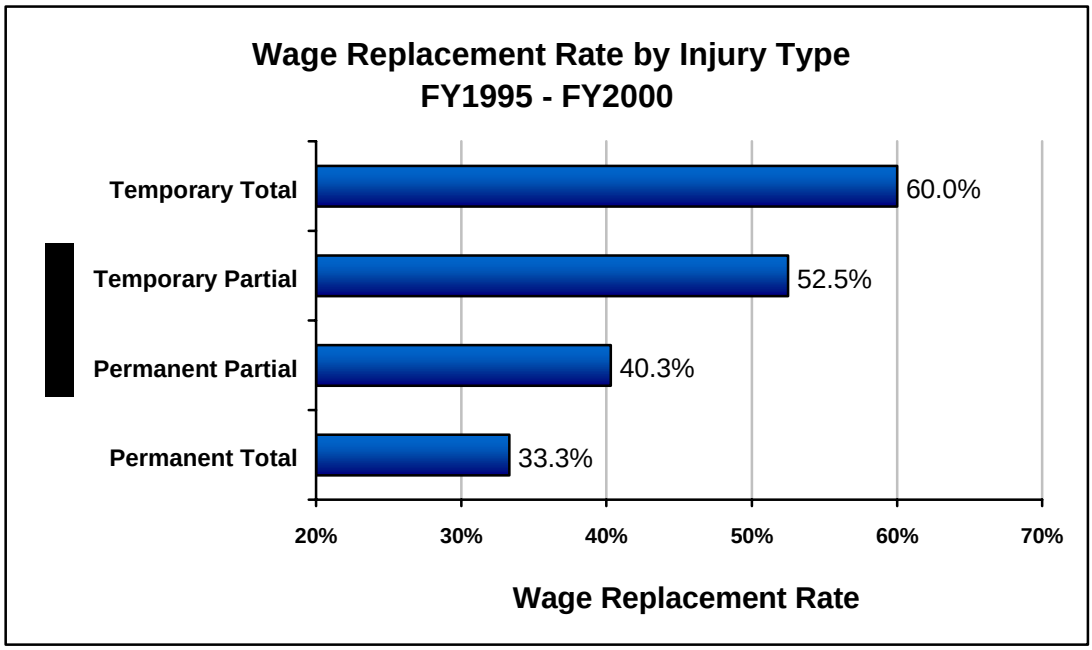
A closed claim study conducted by the Montana Department of Labor and Industry, Employment Relations Division and Insurance Services Offices, Inc.

Executive Summary

Based on our analysis of the data provided to us on Montana workers' compensation claimants, our major findings are as follow:

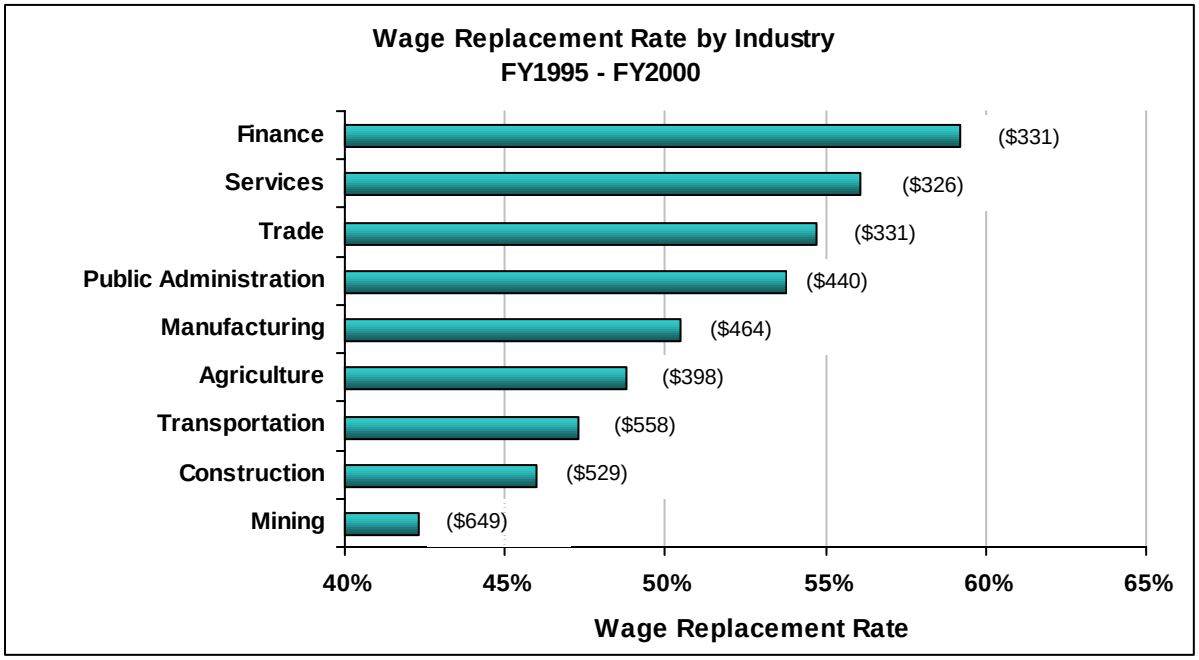
1. Wage benefits received by workers' compensation claimants replace an average of **50.9%** of pre-injury gross wages.

2. Temporary Total claims have the highest wage replacement rate (**60.0%**) relative to other injury types. The wage replacement rates by injury type are shown in the chart below.



3. Female claimants have a higher average wage replacement rate (**58.9%**) than male claimants (**45.0%**). This is due in part to the fact that the average salary for female claimants is lower than for male claimants. Claimants with lower pre-injury wage levels are less affected by the maximum benefit threshold and thus will have a higher replacement rate of lost wages.

4. Workers in the finance and services industries have the highest wage replacement rates of all industries, whereas workers in the construction and mining industries exhibit the lowest. These results are driven by a strong negative correlation between the average wage level in an industry and the wage replacement rate. The higher the average wage, the lower the wage replacement rate. Wage replacement rates by industry are shown below. The average wage level of claimants in each industry is shown in parentheses.



Background and Objectives

One of the features of workers' compensation is to provide a degree of indemnity benefits for those who cannot work due to a work-related injury. For most injuries, weekly indemnity benefits are set at 2/3 of the claimant's pre-injury gross weekly wage subject to a maximum benefit, which equals the statewide average weekly wage. For the purpose of this study, a "wage replacement rate" is defined as the indemnity benefit expressed as a percentage of gross wages lost due to a work-related injury.

The objective of this report is to analyze wage replacement rates in Montana for accident years 1995-2000. The analysis identifies groups of claimants that receive wage replacement rates that are higher or lower than the statewide average and explores the factors underlying those differences.

Conditions and Limitations

Our analysis and the results contained herein are subject to the following conditions and limitations:

1. In preparing our report, we have relied upon the loss data provided to us by the ERD. We have neither audited nor verified the data. ISO does not assume responsibility for any error or omission in the data or information provided to us. Any material error in the data or other information would result in changes to the analysis. In such event, ISO cannot be held responsible for any consequences resulting from its use of incorrect information or data.

2. This analysis has used historical Montana ERD loss experience. To the extent that Montana's workers' compensation environment is different from the past, future experience may differ from the results stated herein. Future changes in the workers' compensation environment have not been addressed in this study.

3. This analysis is based on unadjusted data from accident years 1995-2000. Data from the most recent accident years are immature compared to data from earlier accident years and may change, perhaps significantly, as more information on individual claims is gathered. Therefore, caution should be exercised in extrapolating future experience based on the most recent accident years.

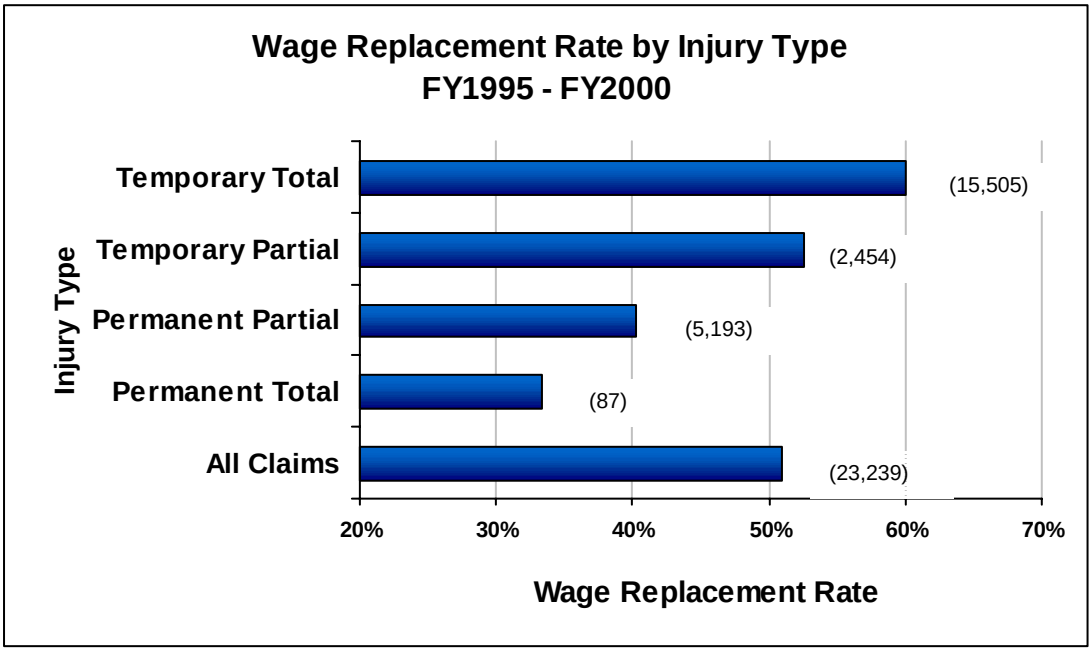
4. Groups of data with a smaller number of claims are more likely to be affected by extreme values than groups with a larger number of claims. Therefore, caution should be exercised in drawing conclusions based on groups of data with a small number of claims, e.g., permanent total, head injuries, etc.

Discussion of Results and Exhibits

Workers' compensation wage replacement rates are determined for each claim by dividing the indemnity benefit by the amount of lost wages. The indemnity benefit is given; the amount of lost wages is calculated by multiplying the pre-injury wage by the duration of the claim. The duration of the claim is determined by dividing the total indemnity benefit by the weekly benefit amount. For example, if the indemnity benefit is $1,000 and the weekly benefit amount is $100, the duration of the claim is calculated to be 10 weeks ($1,000 / $100). If the pre-injury wage for the same claim is $200, the amount of loss wages is determined to be $2,000 ($200 x 10). Finally, the wage replacement rate is calculated as $1,000 / $2,000, or 50%.

Exhibit I displays wage replacement rates by injury type (Temporary Total, Temporary Partial, Permanent Partial, Permanent Total and All Claims). The number of claims by injury type is shown in parentheses. Temporary Total claims have the highest average wage replacement rates and account for approximately 67% of all claims. For all types of claims except Permanent Partial, the maximum benefit is equal to the average statewide weekly wage. Permanent Partial claims have a maximum benefit of one half the average statewide weekly wage. Thus, more Permanent Partial claims are affected by the maximum benefit and show an average wage replacement rate lower than the average rate for all claims. Permanent Total claims show the lowest average wage replacement rate, but also show the fewest number of claims (less than 1% of the total number of claims) and are therefore influenced by individual claims with extreme values.

Exhibit I



Notes: The number of claims for each injury type is provided in parentheses.

Exhibit II shows wage replacement rates by gender and benefit type. For each type of claim, the average wage replacement rate for men is lower than the average wage replacement rate for women. For all claims, the average wage replacement rate for men is 48.2% and the average wage replacement rate for women is 58.9%. The difference in wage replacement rates reflects the difference in the claimants' average weekly wage. Male claimants have an average pre-injury wage of $464 per week while female claimants have an average pre-injury wage of $298 per week. Thus, more male claimants (37.1%) are subject the maximum benefit than female claimants (13.6%).

Exhibit II

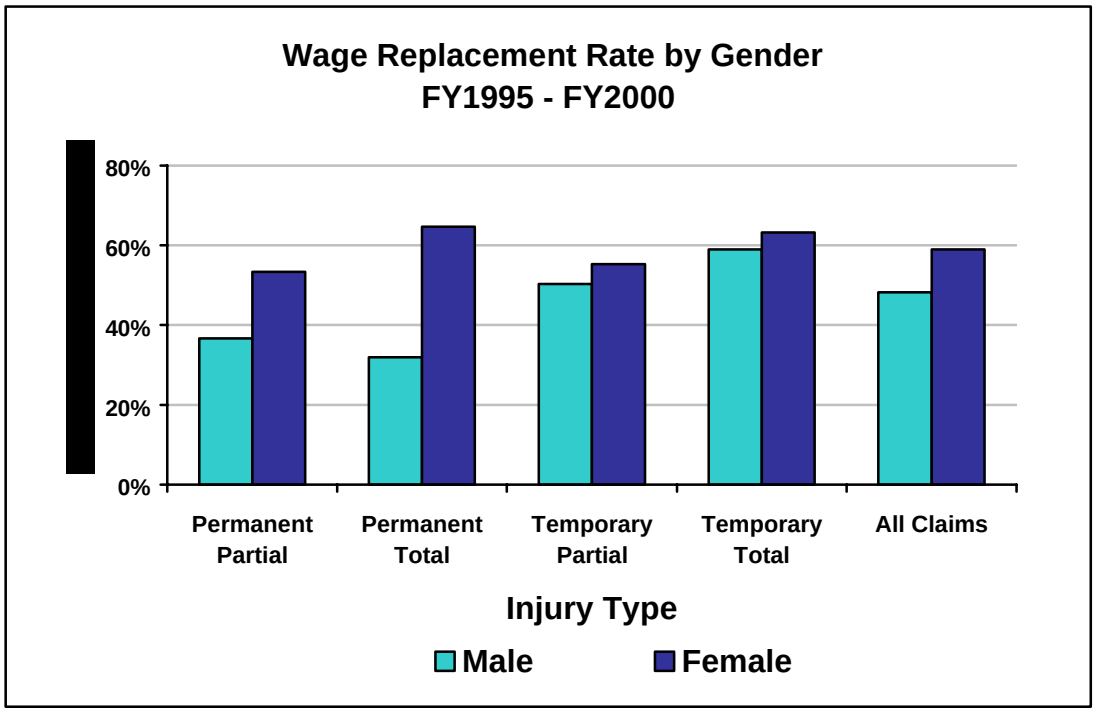


Exhibit III displays wage replacement rates by industry. Workers in the finance and services industries have a much higher wage replacement rate than workers in the transportation, construction, and mining industries. This disparity is a result of two factors. First, the average weekly wage of workers in the finance and services industry is much lower than that in the transportation, construction and mining industries. Many of the claimants in the finance and services industries occupy administrative or clerical positions, which tend to have lower salaries than skilled construction or mine workers. Therefore, benefits for the construction or mining claimants are more susceptible to the maximum, and wage replacement rates are lower. Second, approximately 60% of the claimants in the finance and services industries are women whereas women account for less than 5% of the claimants in the construction and mining industries. As discussed above, female claimants have a lower average wage than male claimants and a higher wage replacement rate as a result.

Exhibit III

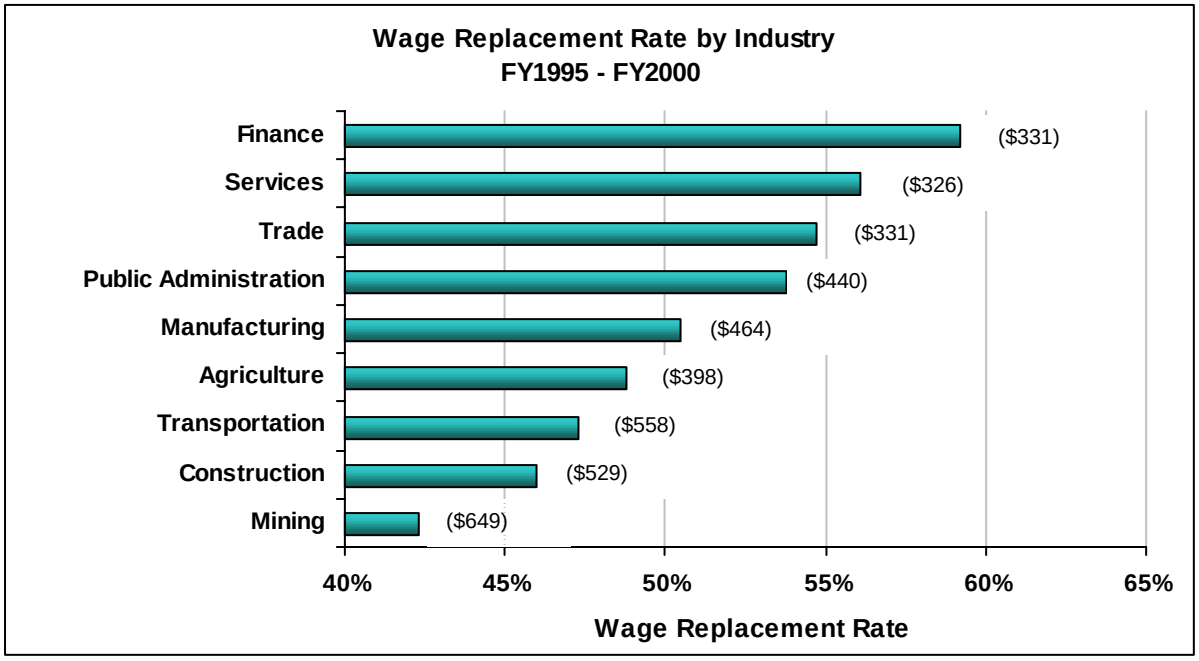


Exhibit IV shows wage replacement rates by claimant age. There is a steady decrease in wage replacement rates, as claimants get older. At retirement age, the trend reverses and the wage replacement rate increases. Older claimants have higher average salaries than younger claimants, as they tend to have more experience and higher-level positions. As such, they are affected by the maximum benefit to a higher degree than younger claimants and have lower wage replacement rates. This trend continues until retirement age, after which the wage replacement rate increases sharply for those claimants over the age of 79. It is likely that claimants who work during retirement generally work part-time at a lower salary level, and are less affected by the maximum benefit. In fact, of the 24 claimants over the age of 79, none were affected by the maximum benefit and thus have a high wage replacement rate.

Exhibit IV

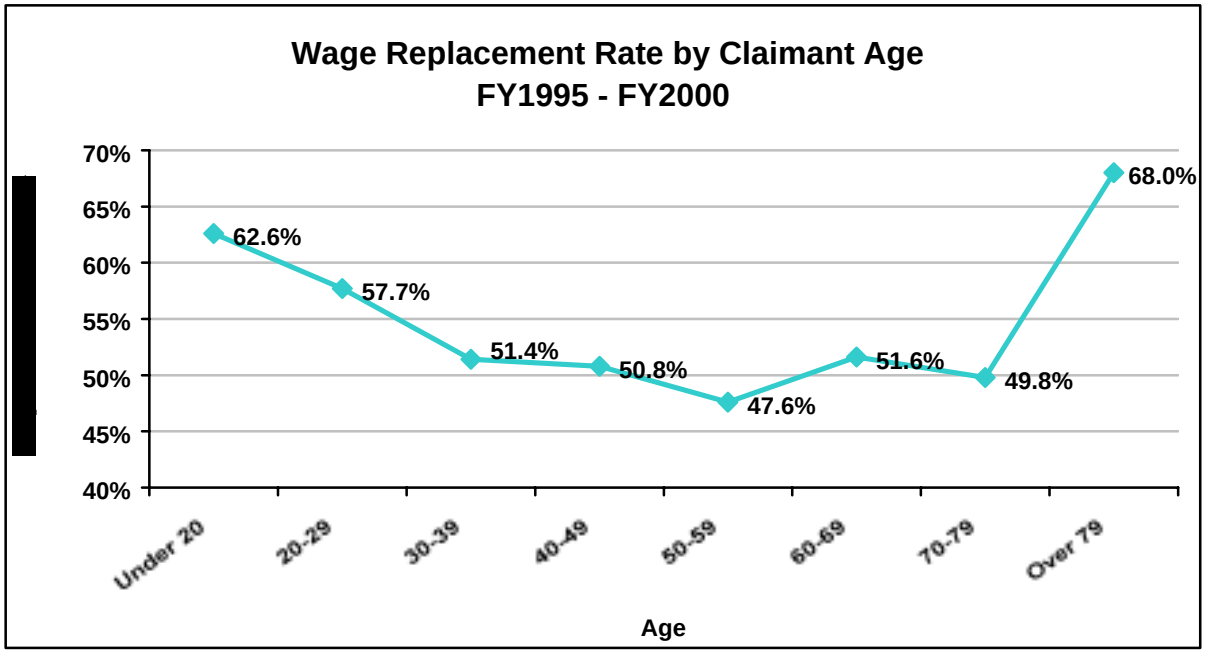


Exhibit V displays wage replacement rates by plan. The state fund has the highest average wage replacement rate while the self-insured plans have the lowest. Many of the claimants in the mining industry are covered by self-insured plans – although self-insured claims account for just 14% of total claims, 44% of all mining claims are covered by self-insured plans. The average salary for claimants in the mining industry is the highest of all industry groups, and these claimants are thus subject to the lowest wage replacement rate. In contrast, the self-insured plans cover none of the claimants in the finance industry. The claimants in the finance industry have one of the lowest average salaries and are disproportionately covered under the state fund – the state fund covers 39% of all claimants, but 47% of those in the finance industry.

Exhibit V

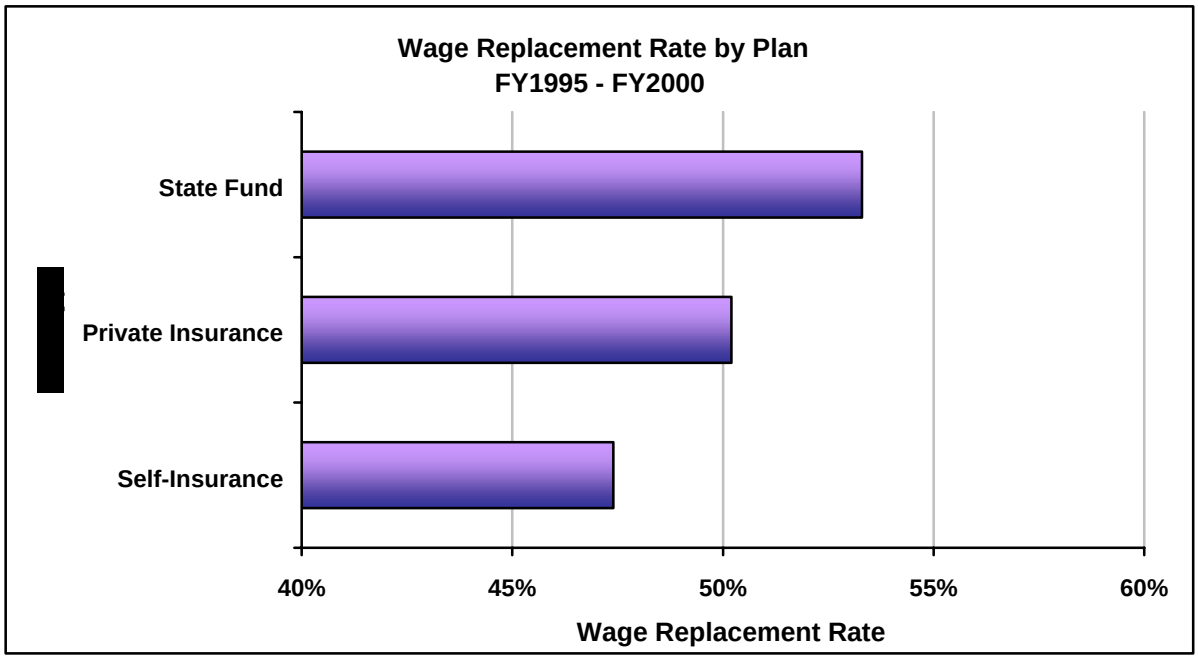


Exhibit VI is a graph of the number of claims by claim duration. Approximately 80% of claims are short-duration in nature. (less than 6 months). After 6 months, there is a sharp decline in the number of claims. This is consistent with the fact that most claims fall into the Temporary Total category. Permanent claims account for just 23% of all claims.

Exhibit VI

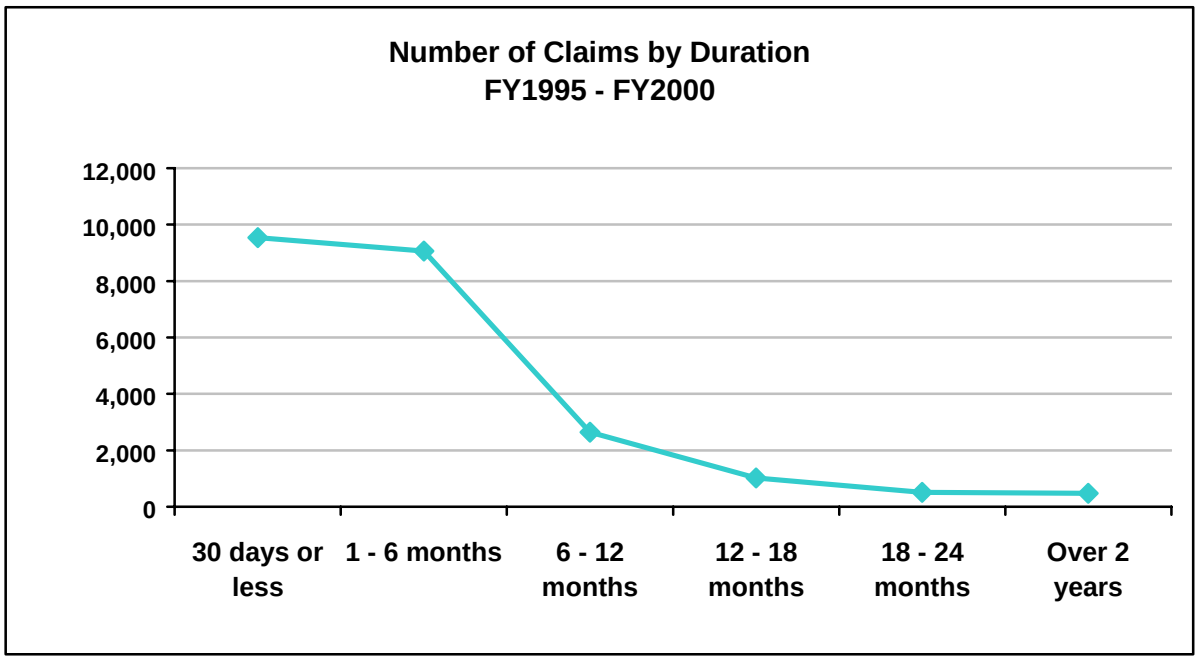
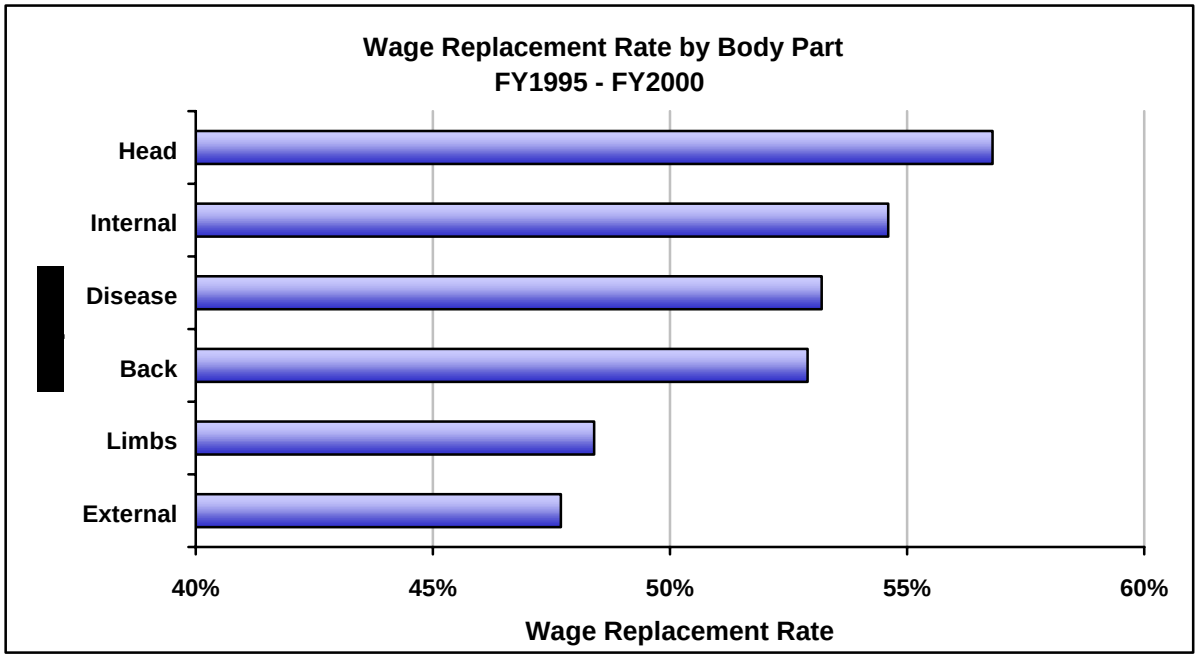


Exhibit VII shows wage replacement rates by body part. Claimants with head injuries have the highest wage replacement rate, while claimants with other external injuries have the lowest. However, the number of claims for head injuries, internal injuries, and diseases combined account for only 5% of the total claims. The majority of claims (55%) are for back injuries, with other external injuries and injuries to limbs accounting for 24% and 16% of claims, respectively. Of these three injury types, back injuries have the highest wage replacement rate, and are also the most common in the service and financial industries.

Exhibit VII



Summary and Conclusions

In general, workers' compensation wage replacement rates vary inversely with average wage levels. In other words, the higher the claimant's weekly salary, the more likely he or she is to reach the maximum benefit level, and the lower his or her benefits will be in relation to the pre-injury wage. The experience of the workers' compensation industry in Montana supports this relationship. Male claimants on average have higher salaries than female claimants, and thus have a lower wage replacement rate. Claimants in the construction and mining industries have higher average salaries than claimants in the finance and services industries, and, accordingly, realize a lower wage replacement rate. Older claimants earn more than younger claimants, and show a lower wage replacement rate.